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EXAMINER

RUTTEN, JAMES D

ART UNIT	PAPER NUMBER
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2192

MAIL DATE	DELIVERY MODE
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09/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/753,856

Applicant(s)

CHARI ET AL.

Examiner

J. Derek Rutten

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/21/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to Applicant's submission filed 7/6/07, responding to the 4/6/07 Office action which detailed the rejection of claims 1-26. Claims 4, 11, 16, 20, 22, and 23 have been amended. Claims 1-26 remain pending in the application and have been fully considered by the examiner.

Response to Amendment

2. As pointed out by Applicants on page 7 of the Response, item AD from the 1/8/04 IDS was considered as item AB from the 10/21/04 IDS. A copy of the related PTO-1449 associated with the 10/21/04 IDS was not found. Therefore, a new copy is submitted herewith.

3. Applicants' amendments have overcome the objections to the claims, which are hereby withdrawn.

4. At the bottom of page 8, with regard to the rejection of claim 1 under 35 U.S.C. § 102(e) over US Patent 6,795,868 to Dingman et al. (hereinafter "Dingman"), Applicants essentially argue that the cited portion of Dingman (i.e. Fig. 4) does not disclose a plurality of coupled data transformation modules. Dingman Fig. 4 was cited to provide an exemplary "method." Further, the plurality of modules can be interpreted as being provided as shown in Fig. 3. Therefore, Applicants' argument is not persuasive.

At the top of page 9, Applicants essentially argue that the cited portion of Dingman does not disclose "generating" a transformation module. However, it is inherent that if a transformation module exists, then it must have first been generated. It could not exist if it had not first been generated. Therefore, Applicants' argument is not persuasive.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "transformation editors" – see middle of page 9 of Applicants' response) are not recited in the rejected claim. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Even if the feature was recited in the claim, Dingman discloses a transformation editor at least at column 30 lines 61-65, e.g. "edited."

At the second paragraph of page 10, Applicants essentially argue that Dingman's metadata does not disclose the step of extracting reference information from the first module for accessing the first module when stored in memory. However, Dingman discloses storing and loading mappings from a transformation map repository. Dingman discloses the extraction of reference information when the step of storing and loading is disclosed. Without reference information, the mappings would be unable to be stored or loaded.

At the bottom of page 10, Applicants essentially argue that Dingman's storage of metadata in a transformation map and repository do not disclose updating a module registry. However, reasonable broad interpretation of the language of the claim permits Dingman to read on the claim language. Dingman column 9 lines 49-51 recites: "Further, metadata may also be generated and stored with each transformation map stored in transformation map repository 214." The repository, i.e. registry, is *updated* through storing metadata with each transformation map. Thus, Applicants arguments are not persuasive.

5. Applicants' further arguments on pages 9 and 10 fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without

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specifically pointing out how the language of the claims patentably distinguishes them from the references. Applicants have essentially broken the language of the claim into phrases and then proceeded to state that the reference fails to disclose each phrase without specifically pointing out how the language of the phrase is distinguished from the reference.

6. Applicants' remaining arguments on pages 11-14 with respect to the rejections under 35 U.S.C. § 103 essentially incorporate previous arguments regarding the Dingman reference. For the same reasons set forth above, these arguments are not persuasive. It is noted that Applicants repeatedly suggest that the Office has admitted that "Dingman does not render any of Applicant's independent claims as obvious" (e.g. see bottom of page 11). To further clarify, Dingman anticipates the independent claims, and is used along with various secondary references to render the remaining claims as obvious.

Claim Rejections

7. The following rejections are essentially reproduced from the 4/6/07 Office action, and are reproduced below for convenience.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. Claims 1, 2, 13, 14, 25, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,795,868 to Dingman et al. (hereinafter “Dingman”).

In regard to claim 1, Dingman discloses:

In a programming environment, a method for developing a transformation program to transform a data structure from a first format to a second format, the program including a plurality of coupled data transformation modules describing the transformation (See Fig. 4), the method comprising the steps of:

generating a first transformation module of the plurality of transformation modules for assembling the program, the first module being a module type of a set of module types including a language constructed module type and a visually constructed module type; See Fig. 2 element 210, also column 9 lines 20-25. The “map designer 210” generates a map, or “module,” using language (“expressions or rules”) or visual (“graphically”) construction.

extracting reference information from the first module for accessing the first module when stored in a memory; and See column 9 lines 30-31 and 49-56, e.g.

“transformation map repository.”

updating a module registry to include a first entry corresponding to the reference information of the first module, the module registry configured for having reference information entries extracted from both the language constructed modules and visually constructed modules. See column 9 lines 49-56, e.g. “metadata ... stored with each transformation map.” Dingman’s transformation maps include both visual and language construction as addressed above.

In regard to claim 2, the above rejection of claim 1 is incorporated. Dingman further discloses: *the step of storing the first module in the memory.* See column 9 lines 30-31.

In regard to claim 13, Dingman discloses a system. See Fig. 2. All further limitations have been addressed in the above rejection of claim 1.

In regard to claim 14, the above rejection of claim 13 is incorporated. All further limitations have been addressed in the above rejection of claim 2.

In regard to claim 25, Dingman discloses: *A computer program product* See column 9 lines 10-13, e.g. “products.” *a computer readable medium;* See column 6 lines

4-5, e.g. "RAM." All further limitations have been addressed in the above rejection of claim 1.

In regard to claim 26, Dingman discloses: *A computer readable medium* See column 6 lines 4-5, e.g. "RAM." All further limitations have been addressed in the above rejection of claim 1.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 3-6 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dingman as applied to claims 2 and 14 above, and further in view of U.S. Patent 6,993,476 to Dutta et al. (hereinafter Dutta).

In regard to claim 3, the above rejection of claim 2 is incorporated. Dingman further discloses: *...using the first entry of the module registry*. See Fig. 2 elements 210 and 214, e.g. "LOAD." Dingman does not expressly disclose: *the step of generating a second transformation module coupled to the first module....* However, Dutta teaches coupling multiple transformation modules. See column 3 lines 14-27. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use

Dutta's teaching of multiple transformations with Dingman's module registry in order to provide device compatible data as suggested by Dutta.

In regard to claim 4, the above rejection of claim 3 is incorporated. Dingman further discloses: *the step of updating the module registry to include a second entry corresponding to reference information of the second module*. Note that "updating" is generally addressed in the above rejection of claim 1. Further Dingman discloses a plurality of entries in column 9 lines 49-51, e.g. "each transformation map."

In regard to claim 5, the above rejection of claim 4 is incorporated. Dingman further discloses: *wherein the second module is of the module type different from the first module*. See column 9 lines 23-25.

In regard to claim 6, the above rejection of claim 5 is incorporated. Dingman further discloses: *wherein the first module is the language constructed module type and the second module is the visually constructed module type*. See column 9 lines 23-25, wherein the first module corresponds with the "expressions or rules" and the second corresponds with the "graphically" constructed mappings.

In regard to claims 15-18, the above rejection of claim 14 is incorporated. All further limitations have been addressed in the above rejection of claims 3-6, respectively.

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12. Claims 7-9, 11, 19-21 and 23 rejected under 35 U.S.C. 103(a) as being unpatentable over Dingman as applied to claims 1 and 13 above, and further in view of U.S. Patent 5,586,328 to Caron et al. (hereinafter "Caron").

In regard to claim 7, the above rejection of claim 1 is incorporated. Dingman does not expressly disclose: *wherein the module registry is a symbol table*. However, Caron teaches that module information is stored in a symbol table. See column 7 lines 37-48. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Caron's symbol table with Dingman's map repository in order to determine which elements are available in a module as suggested by Caron (see column 8 lines 34-36).

In regard to claim 8, the above rejection of claim 7 is incorporated. Dingman further discloses: *the step of including identification information in the reference information*, See column 26 lines 30-37. Dingman does not expressly disclose: *the identification information including a name of the first reference module*. However, Caron teaches using an identification of a name of a module. See column 7 lines 37-39. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Caron's name with Dingman's repository in order to determine the availability of modules as suggested by Caron (see column 8 lines 34-36).

In regard to claim 9, the above rejection of claim 8 is incorporated. Dingman further discloses: *the step of including content information in the reference information*. See column 9 lines 52-56.

In regard to claim 11, the above rejection of claim 1 is incorporated. Dingman does not expressly disclose: *wherein the first module includes a call selected from the group consisting of: a procedure and a function*. However, Caron teaches calling procedures and functions. See column 5 lines 57-65. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Caron's procedures and functions with Dingman's modules in order to return a value as suggested by Caron.

In regard to claims 19-21 and 23, the above rejection of claim 13 is incorporated. All further limitations have been addressed in the above rejection of claims 7-9 and 11, respectively.

13. Claims 10 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dingman and Caron as applied to claims 9 and 21 above, and further in view of U.S. Patent 6,243,859 to Chen-Kuang (hereinafter "Chen-Kuang").

In regard to claim 10, the above rejection of claim 9 is incorporated. Dingman further discloses: *wherein the content information is selected from the group consisting of: ... a descriptive summary of functionality of the first module*. See column 9 lines 52-

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56. Dingman does not expressly disclose: *an argument, an argument type*. However, Chen-Kuang teaches storing arguments and argument types in a table. See column 2 lines 24-28. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Chen-Kuang's argument table with Dingman's content information in order to analyze associated modules as suggested by Chen-Kuang (see column 1 lines 27-31).

In regard to claim 22, the above rejection of claim 21 is incorporated. All further limitations have been addressed in the above rejection of claim 10.

14. Claims 12 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dingman as applied to claims 2 and 14 above.

In regard to claim 12, the above rejection of claim 2 is incorporated. Dingman further discloses: *the step of storing the first module in the memory in a file, the file configured for having at least two of the plurality of coupled transformation modules....* See column 9 lines 36-39, in view of column 3 lines 24-28. Dingman does not expressly disclose: *the two modules being of the same module type*. However, Dingman teaches a repository for storing a plurality of mappings (see column 9 lines 30-35). Dingman also teaches that mappings are created both graphically and programmatically (see column 9 lines 22-25). It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Dingman's storage of multiple modules of the same type in order to store more than 2 mappings.

In regard to claim 24, the above rejection of claim 14 is incorporated. It is further noted that any use of a file carries provides the inherent use of a file system, otherwise the file could not exist. All further limitations have been addressed in the above rejection of claim 12.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Rutten whose telephone number is (571)272-3703. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jdr



TUAN DAM
SUPERVISORY PATENT EXAMINER